

Small-scale Maori horticulture: sustainability and the nexus between introduced crops and traditional lands

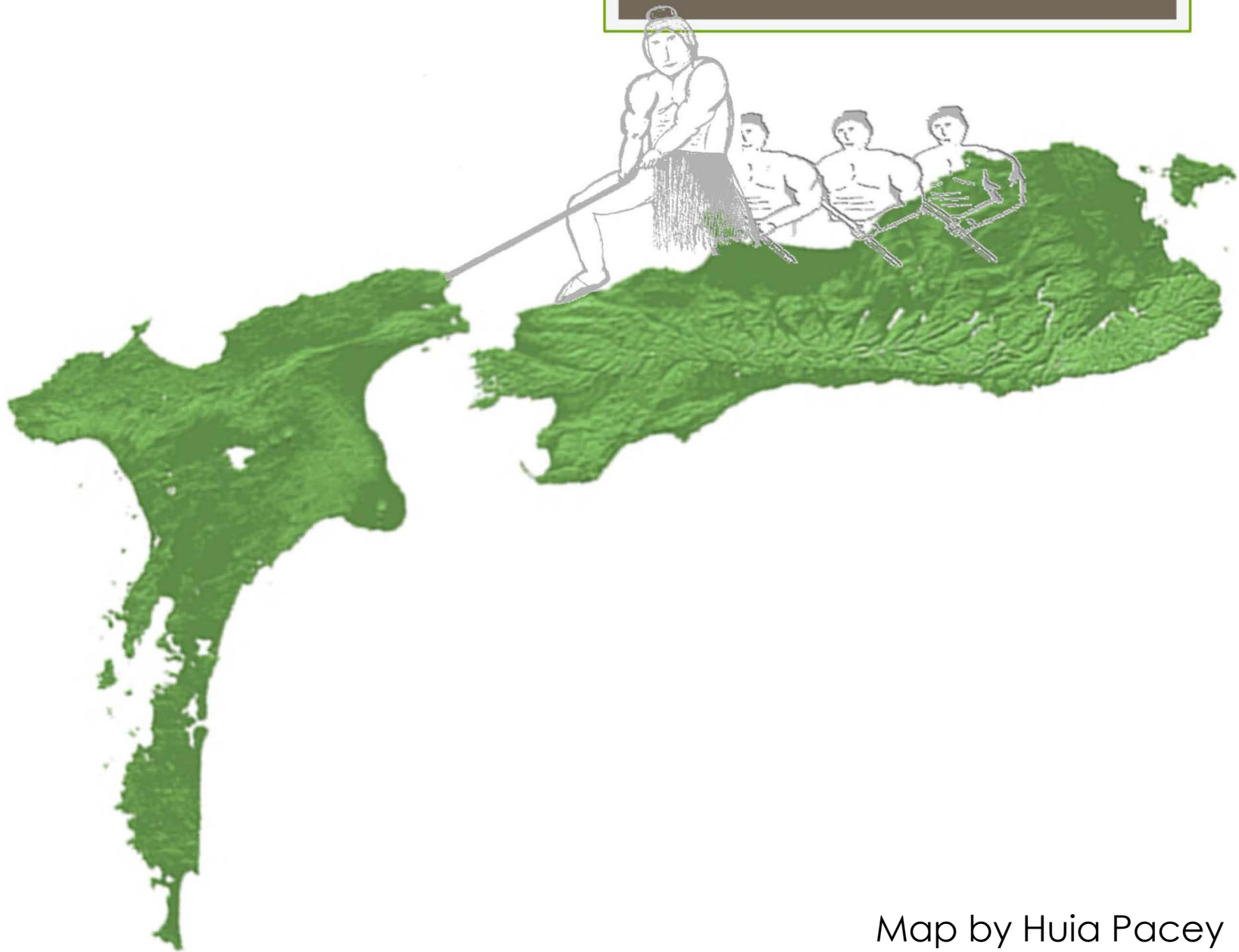


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Nga Ingoa Tawhito

An ancient cultural landscape



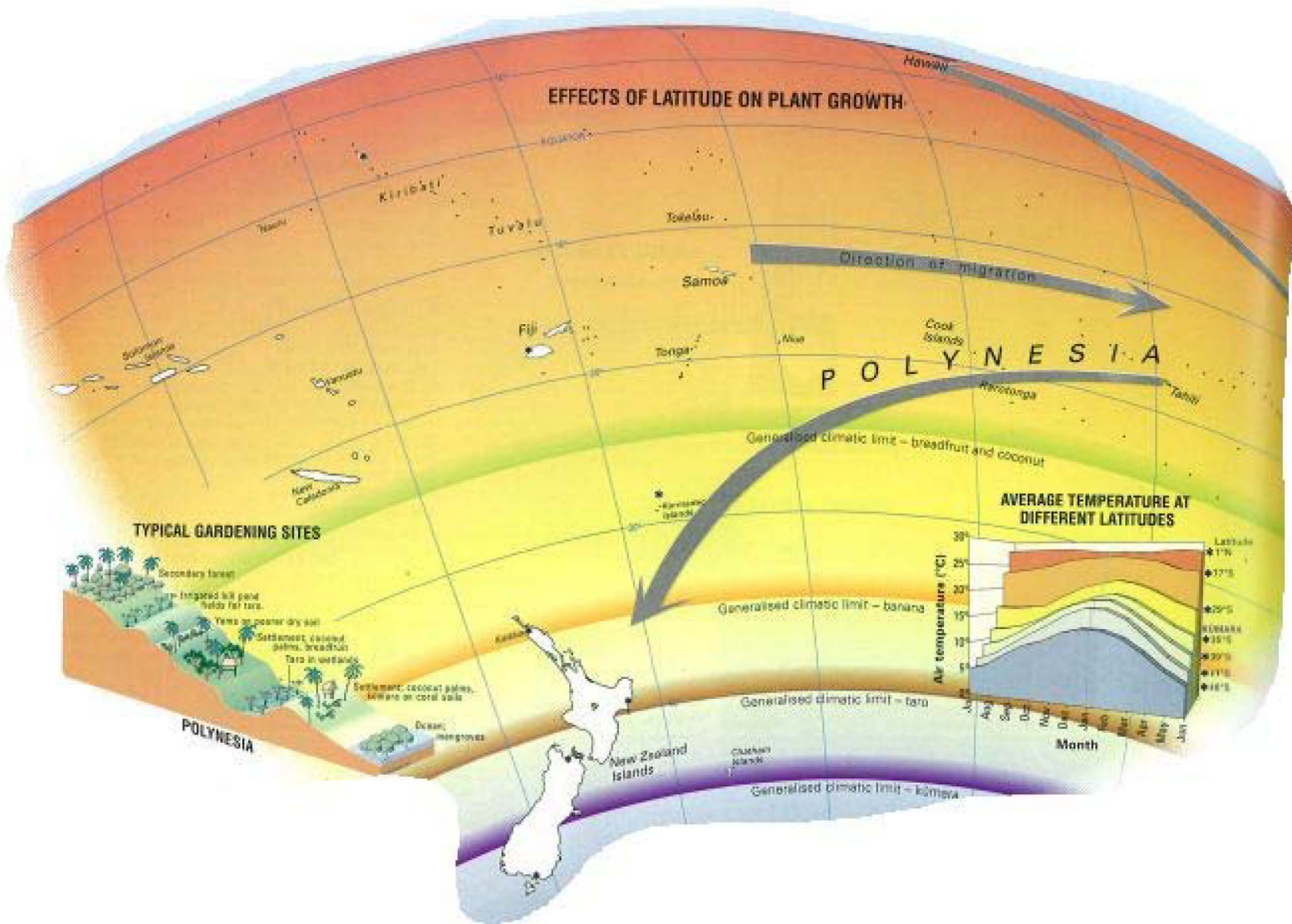


Map by Huia Pacey

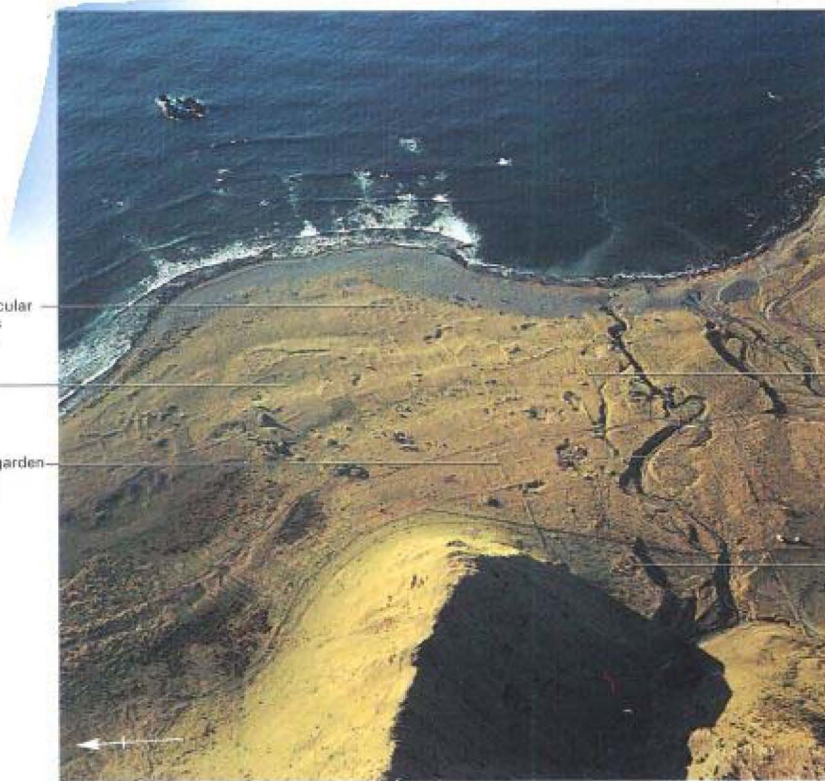
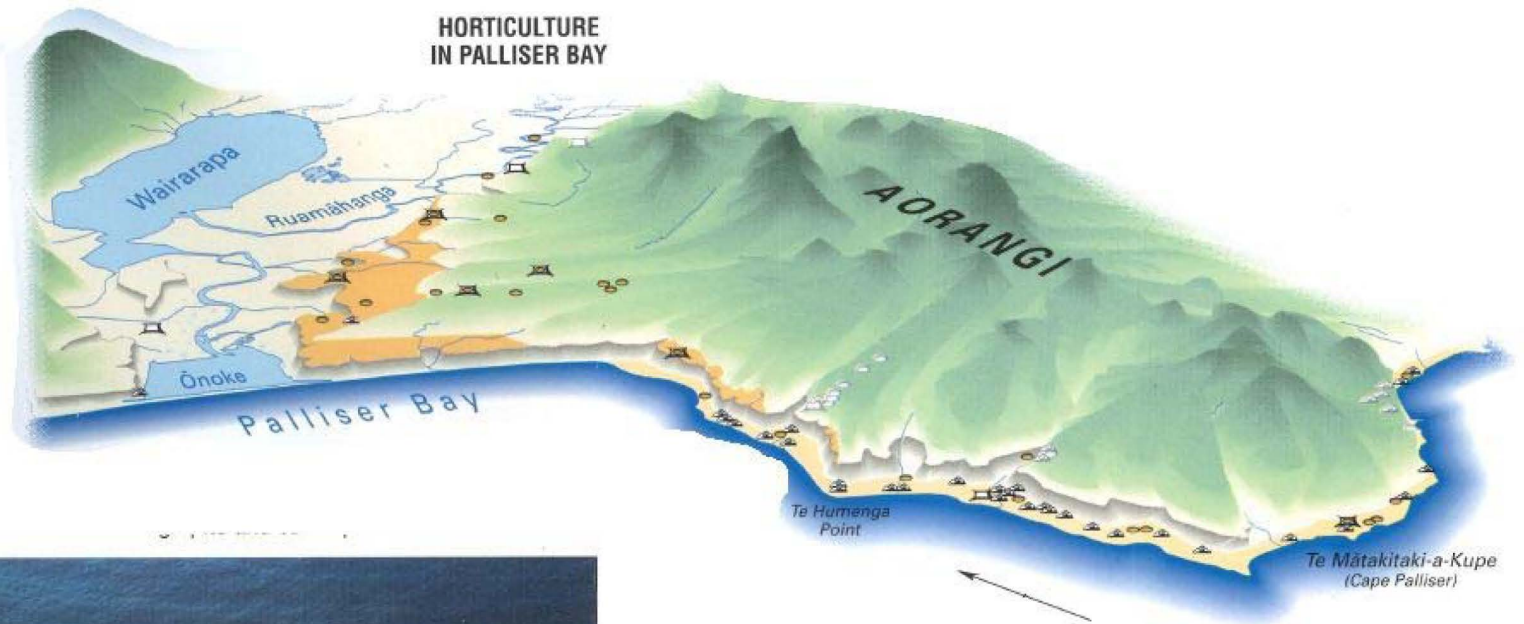
Domesticated species utilised by pre-contact Māori, and origin

| Crop | | Origin |
|---------|---|------------------------|
| Aute | (<i>Broussonetia papyrifera</i>) | Japan, Taiwan |
| Kumara | (<i>Ipomoea batatas</i>) | South America |
| Hue | (<i>Lagenaria vulgaris</i> /L. <i>siceraria</i>) | “ “ |
| Uwhi | (<i>Dioscoria spp.</i>) | Southeast Asia |
| Taro | (<i>Colocasia esculenta</i> , <i>C. antiquorum</i>) | South Central Asia |
| Ti pore | (<i>Cordyline fruticosa</i>) | W. Polynesia/ Kermadec |
| Karaka | (<i>Cocynocarpus laevigata</i>) | “ “ |

EFFECTS OF LATITUDE ON PLANT GROWTH



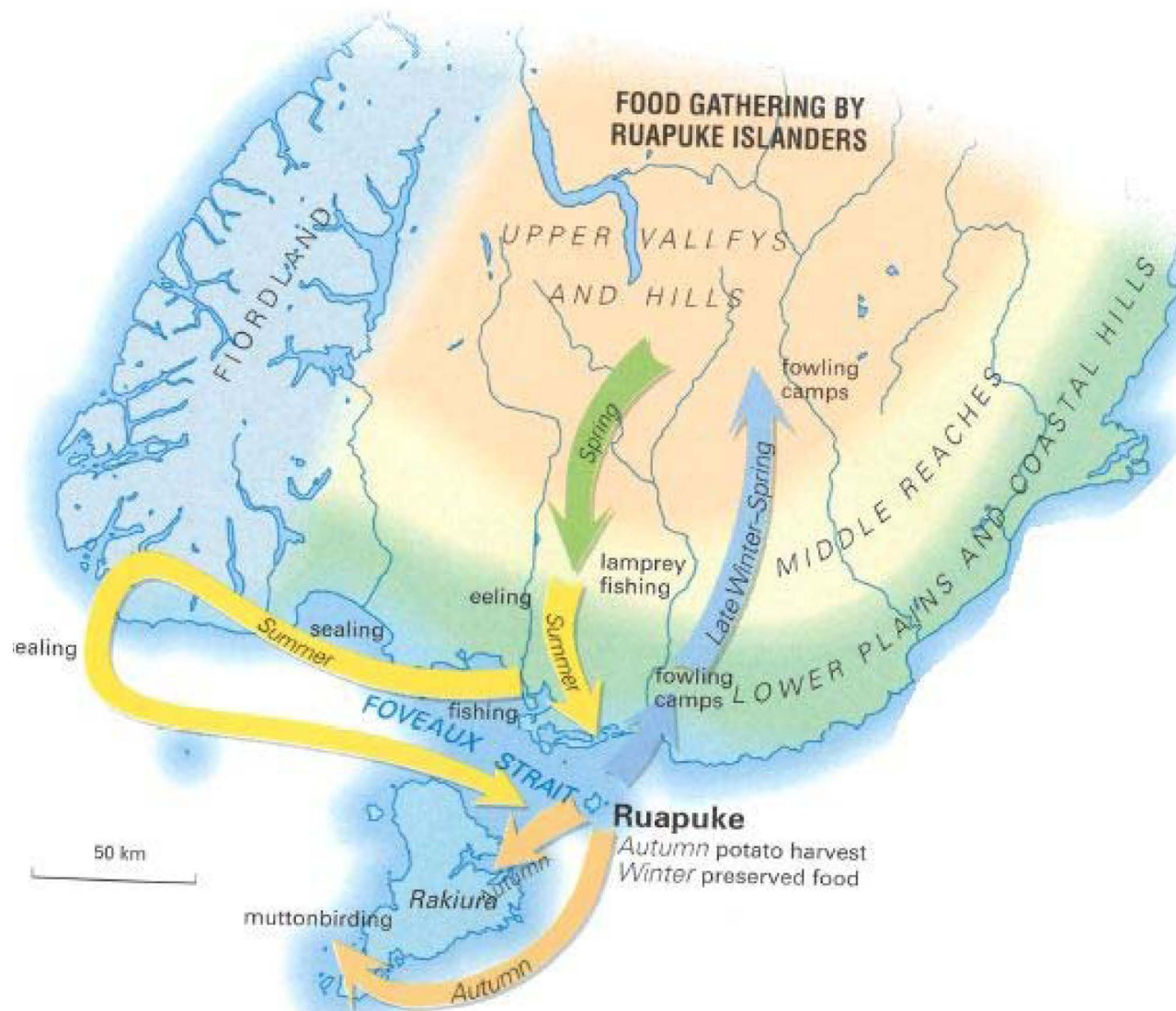
HORTICULTURE IN PALLISER BAY



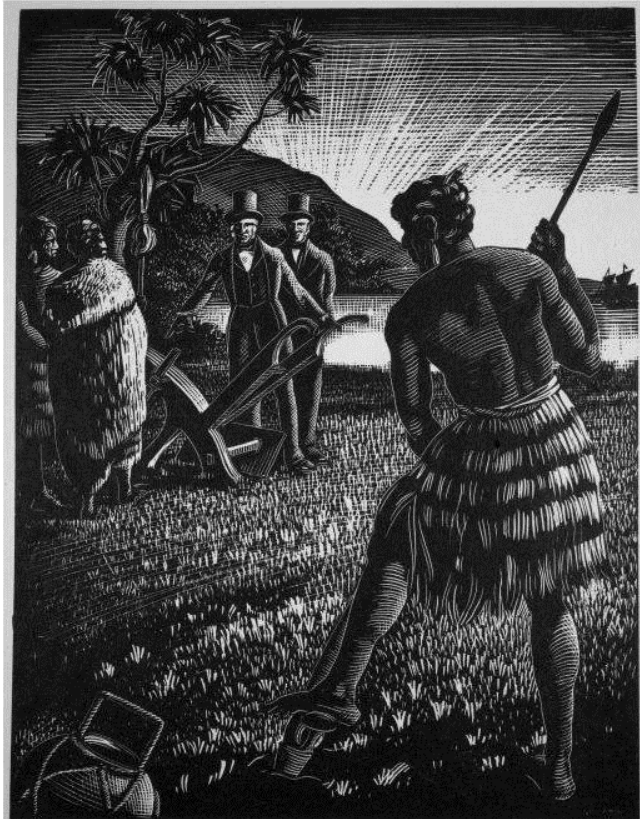
McKinnon, Malcolm, ed. 1997. *New Zealand Historical Atlas/Ko Papatuanuku e Takoto Nei*. Auckland: David Bateman Ltd.

Introduced crops

| Crop | | Origin | Earliest known use |
|------------|--|---------------------------|------------------------------------|
| Potato | (<i>Solanum tuberosum</i>) | Andes | 1769 (Du Surville) |
| Wheat | (<i>Triticum</i> spp.) | Mesopotamia | " |
| Maize | (<i>Zea mays</i>) | Mesoamerica | " |
| Cabbage | (<i>Brassica oleracea</i>) | Mediterranean | 1773 Dusky Sound (Cook & Furneaux) |
| Carrot | (<i>Daucus carota</i>) | Central Asia | " |
| Parsley | (<i>Petroselinum crispum</i>) | Mediterranean | " |
| Parsnip | (<i>Peucedanum sativum</i>) | " | " |
| Pea | (<i>Pisum sativum</i>) | Mediterranean/C. Asia | " |
| Radish | (<i>Raphanus sativus</i>) | Mediterranean | " |
| Turnip | (<i>Brassica. rapa</i> , <i>B. campestris</i>) | Mediterranean/Afghanistan | " |
| Peach | (<i>Amygdalus persica</i>) | China | 1814 (Bay of Islands) early C19th |
| Cherry | (<i>Prunus cerasus</i>) | Central Asia | <1820 |
| Watermelon | (<i>Citrullus vulgaris</i>) | Asia | 1820 Motuara (Bellinghausen) |
| Pumpkin | (<i>Cucurbita pepo</i>) | Mexico | <1837 |
| Marrow | (<i>C. ovifera</i>) | " | <1837 |
| Cucumber | (<i>C. sativus</i>) | India/Southeast Asia | 1838 Thames |
| Grape | (<i>Vitis vinifera</i>) | Middle Asia | <1840 Otago Harbour |
| Lettuce | (<i>Lactuca sativa</i>) | Mediterranean | 1850s Canterbury |
| Watercress | (<i>Nasturtium officiale</i>) | Americas | 1867 |
| Tobacco | (<i>Nicotiana tabacum</i>) | | |



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In the year 1820 the first plough arrived in the Dominion—and the first page of New Zealand's farming history was written!



Post-Contact

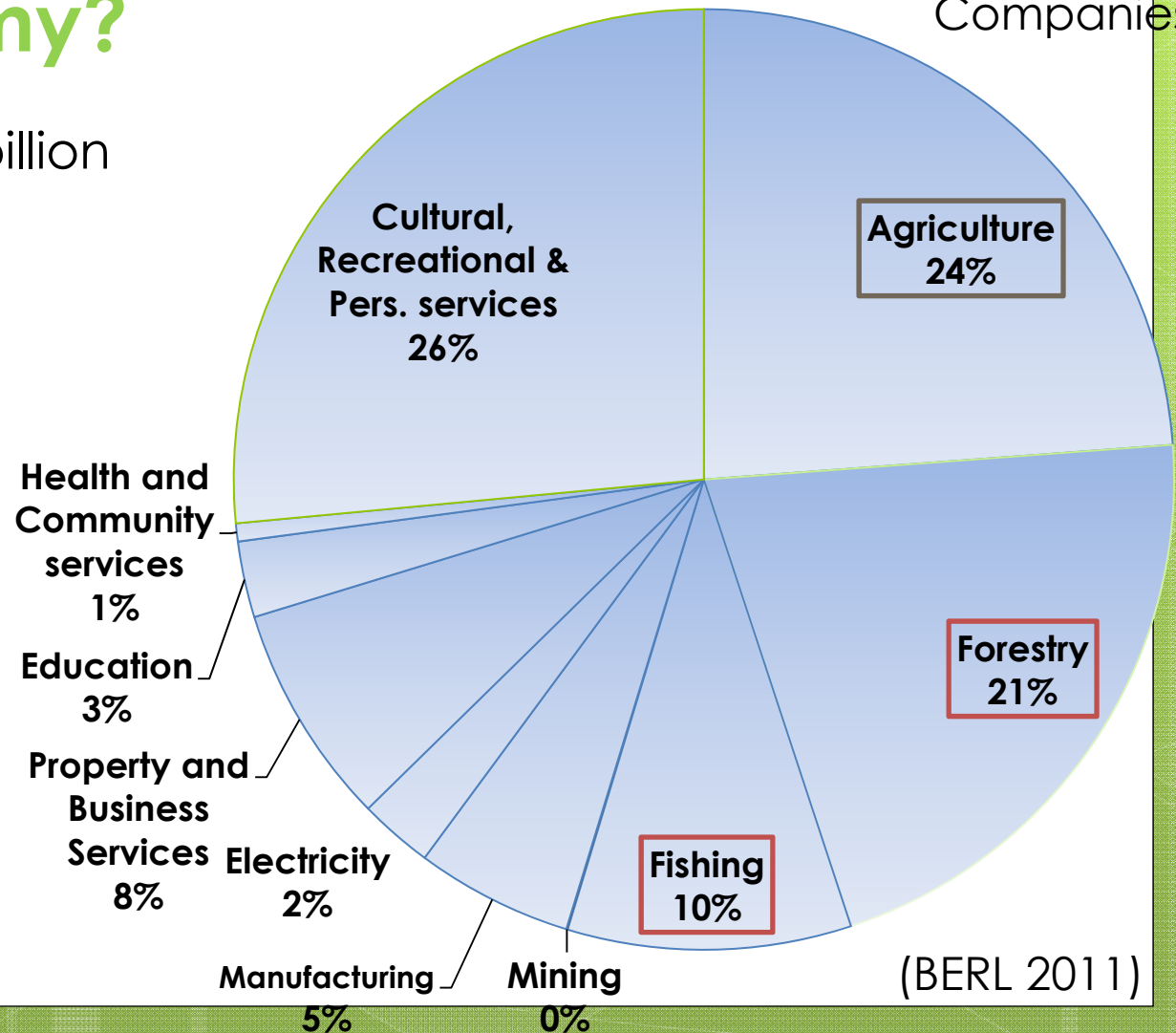
New technologies, PGR, power relationships.

Contemporary Maori economy: a bio-economy?

Primary sector = \$5.8 billion



Trusts, Inc.s, Boards, MIO, PGSEs, Holding Companies



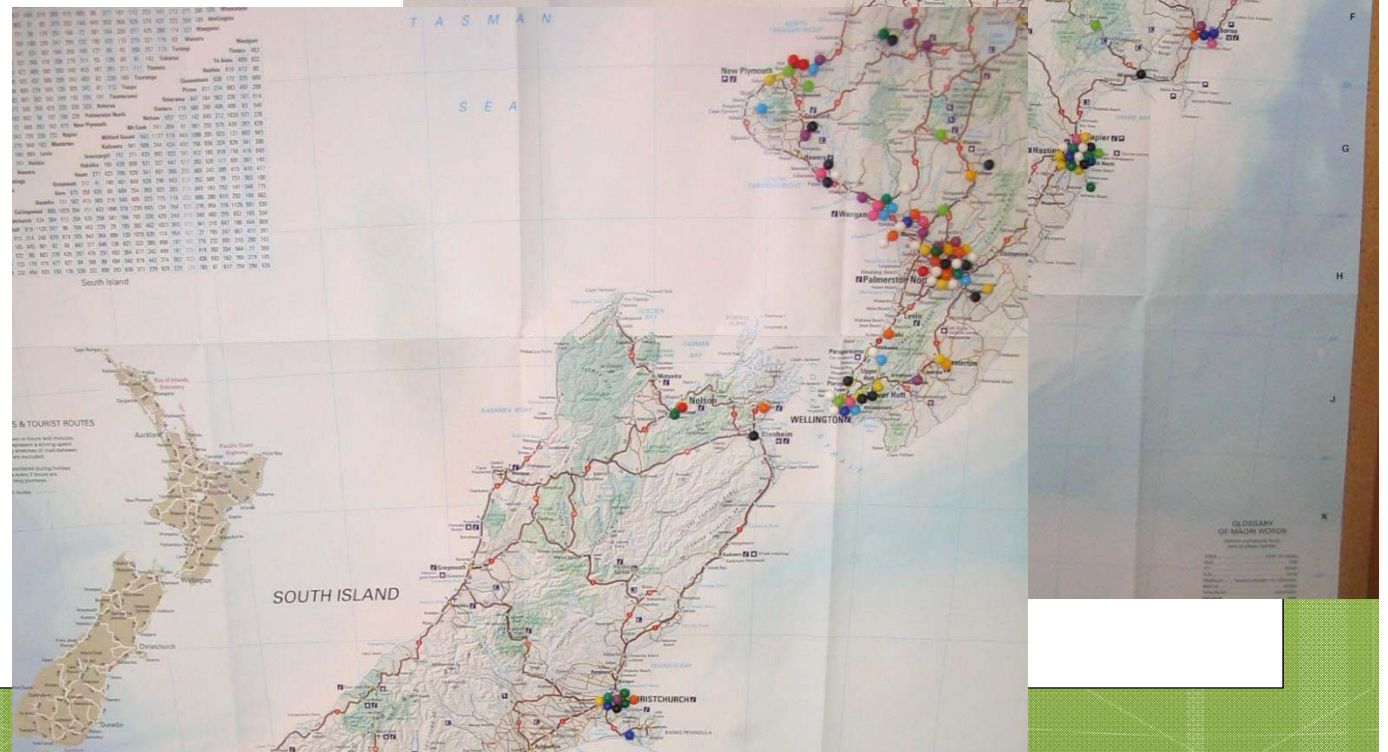
Case Study: Tahuri Whenua

- National Maori Vegetable Growers Collective...
 - To ensure Māori have access to relevant resources in the horticulture industry.
 - Promote an awareness of the Treaty of Waitangi.
 - Facilitate Māori participation in research and development in the horticulture sector.
 - Support Māori Business Development in the horticulture sector through provision of advice and information.



Membership... pan-tribal

- Key leadership employed at a university
- Support of elders
- Reciprocity with community development
- Using traditional networks tribal and marae networks

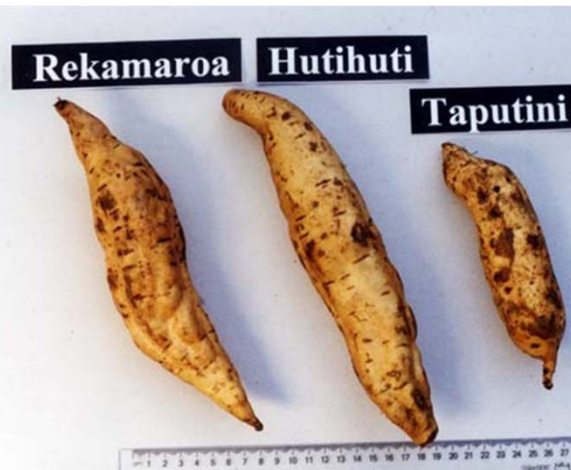




Kumara...



Del Wihongi



Fraser Taiapa





Media interest...

- New product research
- Bulking up seed tubers





Tāhuri Whenua
National Maori Vegetable
Growers Collective



Tāhuri Whenua

Our Team

Projects

Crop Information

News and Reports

Gallery

Merchandise

Contact Us

Links

Register Here

Logo Explanation

resourcing | promoting | facilitating | supporting | advising | informing

Incorporated Society – Representing Māori Interests in the Horticultural Sector

Welcome to the Tāhuri Whenua Website

Spud in a Bucket



Spud In A Bucket (2010)
Tahuri Whenua School Project
[download more details \(pdf\)](#)

Registration Form
[download \(pdf\)](#)

Other examples

- Te Waka Kai Ora
- Aunties Garden



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Simon Lar



picbadges.com/1900767

Aunty's Garden

87 likes · 3 were here

Like

Message



Company

Aunty's Garden is an exciting and innovative initiative that encourages the sustainable development of Māori land in conjunction with the establishment of a premium Māori-based brand to take Māori produce and products to market.

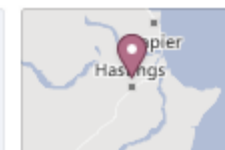
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Photos

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Likes



Map

Aunties Garden



New research-business ventures...

- Proposal to develop new Māori bio-industry on marginal land
 - microbial enhancement of rongoā/medicinal plants such as manuka.



Issues

- Historical
 - Fragmentation
 - Marginalisation
 - Discrimination
- Contemporary
 - Corporatisation
 - Marginalisation
 - Discrimination

- Aging membership
- Funding
- Focus
- Secession planning



Summary

- Radical adaptations from small-island, oceanic world to extensive temperate lands.
- Rapid adoption of post-contact neo-European landscaping
- Marginalisation and fragmentation has led to retention of (some) subsistence skills and associated traditional knowledge
- Relationships established within sector including research institutes and universities
- But challenges to maintaining production (of crops and knowledge) remain
- Contemporary Maori bio-economy challenged by wide-ranging sustainability challenges.

